



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,082	06/08/2001	Yuki Ito	016907/1235	9384

22428 7590 11/30/2004

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

VUONG, JASON DUY ANH

ART UNIT PAPER NUMBER

2626

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/876,082

Applicant(s)

ITO, YUKI

Examiner

Jason D. A. Vuong

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Multifunctional Imaging Device Capable of Reducing Power Consumption in Sleep Mode."

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 2, 3, 4, 5, 6, 7, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1 (Line 12), the phrase "one processing means" is considered as indefinite because it is unclear whether it refers to the processing means that is currently in ready state, idle state, or sleep state.

Regarding Claim 3 (Line 20), Claim 4 (Line 25), and Claim 8 (Line 17), the phrase "said processing means" is considered as indefinite because it is unclear

Art Unit: 2626

whether it refers to the processing means that is currently in ready state, idle state, or sleep state. It is also unclear whether the same phrase would imply that each processing section has its own internal controller.

Regarding **Claim 5 (Line 20)**, the phrase “such one processing section” is considered as indefinite because it is unclear whether it refers to the processing section that is currently in ready state, idle state, or sleep state.

Regarding **Claim 7 (Lines 11-12, and Line 13)**, the phrase “such one processing means” is considered as indefinite because it is unclear whether it refers to the processing means that is currently in ready state, idle state, or sleep state.

Regarding **Claim 8 (Lines 19-20)**, the phrase “said control means” is considered as indefinite because it is unclear whether it refers to the internal control means, or the system control means.

**Claims 2, 3, and 4** are rejected because they depend on the rejected **Claim 1** above.

**Claim 6** is rejected because it depends on the rejected **Claim 5** above.

**Claim 8** is rejected because it depends on the rejected **Claim 7** above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 2, 3, 4, 5, 6, 7, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2002/0126516 A1 to Jeon.

Regarding **Claim 1**, Jeon discloses a control apparatus (see Figure 1) for an ink-jet printer that is capable of saving power in a sleep mode. The control unit has a timer, which generates a sleep mode signal after a predetermined time period has passed (refer to Paragraph [0029] Lines 2-6). Jeon does not explicitly disclose a composite apparatus comprises plurality of processing means each having an independent timer.

However, Jeon does indicate that his control apparatus can be applied to a composite system (refer to Paragraph [0025] Line 3, and Lines 5-6). Even though Jeon does not explicitly describe a composite apparatus comprises plurality of processing sections, the function-performing unit (Element 12 of Figure 1) clearly suggests an all-in-one, or composite system by performing fax function, scanning function, copying function, and printing function (refer to Paragraph [0025] Lines 4-8). So the function-

Art Unit: 2626

performing unit clearly indicates a composite apparatus comprises plurality of processing sections, or functions.

One having ordinary skill in the art can simply create as many timers, or counters as needed for each processing section, and the timers can be synchronized by simply resetting them simultaneously to zero. Further, it is conventional for timers in a system to be synchronized with one another. The motivation to have a timer for each processing section, and to synchronize the ready timers with the sleep timer is to flexibly control various processing sections and to further reduce the power consumption of the composite system. When a processing section is in sleep mode there is a low possibility that other operation is carried out; therefore power consumption is further reduced by placing other processing sections in sleep mode.

Regarding **Claim 2**, Jeon's invention has a main control unit that checks whether the function-performing unit finishes performing a function or still performs the function (refer to Paragraph [0028] Lines 6-9); this checking process is equivalent to a ready-state checking process.

Regarding **Claim 3**, Jeon's invention has an internal control means (the auxiliary control unit, Figure 1 Element 16) that can place a processing means in sleep mode (see Figure 1) by communicating the state information between the main control unit and the auxiliary control unit (refer to Paragraph [0028] Last seven lines).

Regarding **Claim 4**, Jeon's invention discloses that communication is made between the main control unit and the auxiliary control unit, and a decision of whether to place the processing section in sleep mode is made (refer to Paragraph [0028] Last seven lines).

Regarding **Claim 5**, Jeon's invention can be applied to a composite system that has a scanning function, a printing function, a fax function (refer to Paragraph [0025] Lines 5-6), power supplies (see Figure 1, Elements 10 and 18), and a main control unit (see Figure 1 Element 14). Note: element 12 of Figure 1 indicates that it can perform fax function, scanning function, copying function, and printing function (refer to Paragraph [0025] Lines 4-8) which would clearly suggest an all-in-one, or composite system. The main control unit can check whether the function-performing unit finishes performing a function or still performs the function (refer to Paragraph [0028] Lines 6-9); this checking process is equivalent to checking whether or not a processing means is ready. Jeon does not explicitly mention that each processing section must have a timer, and that the ready timers are synchronized with the sleep timer.

However, one having ordinary skill in the art can create as many timers or counters as needed for each processing section, and the synchronization of the timers or counters can be done by simply simultaneously resetting them to zero. Further, it is conventional for timers in a system to be synchronized with one another. The motivation to have a timer for each processing section, and to synchronize the ready timers with the sleep timer is to flexibly control various processing sections and to

Art Unit: 2626

further reduce the power consumption of the composite system. When a processing section is in sleep mode there is a low possibility that other operation is carried out; therefore power consumption is further reduced by placing other processing sections in sleep mode.

Regarding **Claim 6**, one having ordinary skill in the art can utilize Jeon's main control unit as a system controller, which can communicate with the auxiliary control unit (the auxiliary control unit can be part of the printer controller) to place the printer controller in sleep mode.

Regarding **Claim 7**, Jeon discloses a method of controlling a composite system having a plurality of processing sections (refer to Paragraph [0025] Lines 5-6). Note: element 12 of Figure 1 indicates that it can perform fax function, scanning function, copying function, and printing function (refer to Paragraph [0025] Lines 4-8) which would clearly suggest an all-in-one, or composite system. The main control unit can check whether the function-performing unit finishes performing a function or still performs the function; this checking process is equivalent to a ready-state checking process. Jeon does not explicitly mention that each processing section must have a timer, and that the ready timers are synchronized with the sleep timer.

However, one having ordinary skill in the art can create as many timers or counters as needed for each processing section, and the synchronization of the timers or counters can be done by simply simultaneously resetting them to zero. Further, it is



Art Unit: 2626

conventional for timers in a system to be synchronized with one another. The motivation to have a timer for each processing section, and to synchronize the ready timers with the sleep timer is to flexibly control various processing sections and to further reduce the power consumption of the composite system. When a processing section is in sleep mode there is a low possibility that other operation is carried out; therefore power consumption is further reduced by placing other processing sections in sleep mode.

Regarding **Claim 8**, Jeon's main control unit communicates to the auxiliary control unit (which can serve as an internal control means) to make a decision of whether to put the processing section in sleep mode (refer to Paragraph [0028] Last seven lines).

### ***Conclusion***

Any inquiry concerning this communication should be directed to Jason Vuong at 703-306-4157.



JOSEPH MANCOS  
PRIMARY EXAMINEE